# **REMARKS**

Reconsideration and allowance of the above identified application are requested.

Specification.

The paragraph that starts on page 2, line 31 is amended to clarify the claimed invention within the scope of the original application. The Applicant's invention claims dressings made with an emulsified liquid shortening composition comprising dietary fiber gel. The dietary fiber gel of the invention is disclosed by Inglett (U.S. Patent, Number 5,766,622, dated June 16, 1998), which was incorporated by reference into the original as-filed application at page 2, line 32. Information included by reference is "as much a part of the application as filed . . . , and should be treated as part of the text of the application as filed." MPEP § 2163.07(h). Clearly, dietary fiber gel as disclosed by Ingett is part of the as-filed application.

Inglett teaches at Col. 1, lines 9-12, that it is well known that "[d]ietary fibers are generally considered to be the soluble and <u>insoluble</u> components of cell walls . . . [and] consist primarily of cellulose, hemicellulose," and so forth. In the process of the invention, Ingett at Col. 3, lines 24-32, explicitly teaches that "[f]ollowing at least the second stage of treatment . . . the solids are separated for the liquids and the recovered <u>insolubles</u> are carried forward to the next processing step, [wherein] the second stage separation is intended to isolate and recover <u>the gel product</u> of this invention," i.e., dietary fiber gel. The source of the dietary fiber is agricultural by-products such as grain seed brans, hulls, and so forth is noted by Inglett at Col. 3, lines 3-8.

Inglett implicitly teaches that dietary fiber gel is insoluble dietary fiber derived from the alkaline treatment of agricultural by-products. Inglett at Col. 3, line 33 to Col. 4, line 36 teaches the first stage of treatment is "preferably in the range of about ... pH 9-13. The gel products ... contained in the insoluble fraction . . . from the first stage . . . are subjected to [a] second stage . . . [of] treatment . . . at alkali pHs, preferably in the range of 7-12. Following the second stage . . . solids are again separated from the liquids . . . [and] the recovered solids consist of cellular debris in the form of a hydrated gel. The gel may be dried." One skilled in the art would know that solids separated from liquid after the second stage are implicitly insoluble dietary fiber. Clearly, because Inglett explicitly and implicitly teaches dietary fiber gel as the insoluble

component of dietary fiber that can be recovered and formed into a gel, so does the as-filed application.

As to the physical form of the dietary fiber gel, Inglett at Col. 5, lines 43-45, explicitly teaches that dietary fiber gel "may exist in either the hydrated form as gels or in the dehydrated form as flakes or powder."

Inglett inherently teaches an amorphous dietary fiber gel because the gel exhibits a smooth morphology. For example, at Col. 4, line 63 to Col. 5, line 3, Inglett teaches that dietary fiber gel has "a smooth sheet- or film-like morphology" based on scanning electron photographs at magnifications of 500-1000X, and "[t]he smoothness of the original gels are restored after reconstitution of the dried products." Typically, crystal structures are characterized by sharp edges that result in rough, jagged, and under scanning electron microscopic magnification a generally non-smooth morphology such that one skilled in the art would know that dietary fiber gel that has a smooth morphology would be inherently amorphous.

Thus, dietary fiber gel in the Applicant's invention comprises non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products. Although the specification has been amended so as to more reasonably convey the invention, and more specifically what dietary fiber gel is to one skilled in the art, the amendments to the specification are expressly, implicitly, or inherently supported by the Inglett patent, a part of the original as-filed application.

# 35 U.S.C. § 102(b) Claim Rejection.

The Applicant traverses the rejection of Claims 1-5 as anticipated under 35 U.S.C. § 102 (b) because the reference Baer, cited in the Examiner's Office Action, teaches dressing comprising a fat substitute comprising particulate microcrystalline cellulose. The Applicant's invention on the other hand discloses dressing comprising an emulsified liquid shorting, a fat substitute, comprising dietary fiber gel having non-particulate amorphous insoluble fiber.

There is nothing disclosed in Baer that anticipates the Applicant's invention as suggested by the Examiner. Anticipation depends on prior publication of the invention. 35 U.S.C. § 102(b). The establishment of anticipation requires that every element or limitation of the claimed invention can be found in a single prior publication. Verdegaal Bros. v. Union Oil Co. of

California, 814 F.2d 628, 631 (Fed. Cir. 1987). The Applicant traverses the rejection because nothing in Baer teaches all the elements and limitations of the Applicant's claimed invention.

The Applicant's invention claims dressings made with an emulsified liquid shortening composition comprising dietary fiber gel derived from agricultural by-products grains such as seed brans, hulls, and so forth. The specification, as amended, discloses that the dietary fiber gel in the Applicant's invention comprises non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products. Nothing in the cited references teaches shortening or fat substitute compositions comprising dietary fiber gel comprising non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products.

For example, Baer at Col. 3, lines 60-62, teaches fat substitutes comprising a particulate microreticulated microcrystalline cellulose, a source of dietary fiber. The natural sources of the cellulose as pointed out by Baer at Col. 4, lines 50-53, are "tightly packed crystalline regions... interspersed with ... amorphous areas [of fiber], called par-crystalline regions." Further, Baer at Col. 4, lines 31-36, states that "[i]t is <u>important</u> that the ... cellulose ... be prepared from highly crystalline microcrystalline celluloses ... conventionally prepared from <u>wood pulp</u> by acid hydrolysis of cellulose fiber." At Col. 4, line 53-57, Baer specifically notes that the importance of acid hydrolysis is "to attack the para-crystalline [or amorphous] regions." One skilled in the art would know that a particulate microcrystalline celluslose derived from the acid hydrolysis of wood pulp that specifically attacks amorphous cellulose differs from a non-crystalline or amorphous non-particulate insoluble dietary fiber derived from the alkaline treatment of agricultural by-products that substantially disrupts cellular structure. Clearly, Baer teaches fat substitutes that comprise particulate microcrystalline dietary fiber, and not amorphous non-particulate insoluble dietary fiber.

# Nonstatutory Double Patenting Rejection.

The Applicant traverses the provisional rejection of Claims 1-5 as obviousness-type double patenting based on a judicially created doctrine because the references, Application No. 10/689,269 in view of Baer, teach, generally, food products comprising fat substitutes comprising particles of microcrystalline cellulose. The Applicant's invention on the other hand

specifically teaches dressings comprising emulsified liquid shortening, a fat substitute, comprising dietary fiber gel comprising non-particulate amorphous insoluble fiber.

# The References Do Not Teach the Claimed Invention

There is nothing disclosed in the copending Application No. 10/689,269 for processed meats in view of Baer that teaches the modification of the references suggested by the Examiner. Obviousness, including obviousness-type double patenting, depends on the differences between a claimed invention and the prior art. See generally, 35 U.S.C. § 103(a). The establishment of obviousness requires that the prior art must teach or suggest all the limitations of the claimed invention. See also, In re Royka, 490 F.2d 981, 984-85 (CCPA 1974). The Applicant traverses the rejection because nothing in Application No. 10/689,269 in view of Baer teaches all the elements and limitations of the Applicant's claimed invention.

Application No. 10/689,269 teaches processed meats comprising emulsified liquid shortening containing dietary fiber gel such that the solids within the dietary fiber gel represent 0.1 percent to 5.0 percent and 0.1 percent to 7.0 percent by weight of the overall processed meat. Baer teaches generally food products and specifically dressings comprising particulate microcrystalline cellulose. Thus, combining Application No. 10/689,269 in view of Baer clearly teaches generally food products comprising a fat substitute comprising particulate microcrystalline cellulose wherein the solids in the microcrystalline cellulose represent 0.1 percent to 5.0 percent and 0.1 percent to 7.0 percent by weight of the overall food products. No combination of the cited prior art references teach the invention claimed in Application No. 10/689,267, dressings comprising emulsified liquid shortening comprising non-particulate amorphous insoluble dietary fiber gel wherein the solids in the dietary fiber gel represent 0.1 percent to 0.5 percent and 0.1 percent to 3.0 percent by weight of the overall dressing.

For example, at Col. 3, line 60 to Col. 4, line 5 Baer generally teaches food products comprising particulate microcrystalline cellulose. Baer at Col. 14, lines 56-66 and at Col. 20-21, lines 16-18, more specifically teaches dressing having a fat substitute comprising fiber in the form of particles of microcrystalline cellulose; however Baer never teaches meats of any kind having a fat substitute. Although Baer teaches food products, a genus, comprising particulate microcrystalline cellulose, Baer does not teach meats, preferably processed meats, a specie of food products, comprising particulate microcrystalline cellulose. Thus, the claimed invention in

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Application No. 10/689,267 for dressings would not be obvious based on Application No. 10/689,269 for processed meat in view of Baer which teach foods generally and not meat specifically. In other words, more general inventions can be obvious in view of a specific invention, but other distinct and separate specific inventions are not necessarily obvious in view of more generally claimed inventions. Clearly, Application No. 10/689,269 in view of Baer teaches the genus of food products comprising fat substitute comprising microcrystalline cellulose, but does not teach the Applicant's invention, as described in Application No. 10/689,267, of dressings, a specie of food products, comprising emulsified liquid shortening, a fat substitute, comprising non-particulate amorphous insoluble dietary fiber gel.

Thus, Application No. 10/689,269 in view of Baer teaches the genus of food product having particulate microcrystalline cellulose of 0.1 percent to 5.0 percent and 0.1 percent to 7.0 percent by weight of the overall food product, while Application No. 10/689,267 for dressing, a food product specie, teaches a different and more limiting range of dietary fiber gel of 0.1 percent to 0.5 percent and 0.1 percent to 3.0 percent by weight of the overall dressing. Clearly, Application No. 10/689,269 in view of Baer teaches the genus of food products having a broader range of particulate microcrystalline cellulose, and does not teach dressings, a specie of food products, as in Application No. 10/689,267 having a substantially different and narrower range of non-particulate amorphous insoluble dietary fiber gel.

# The References Lack Any Suggestion to Combine

There is nothing disclosed in copending Application No. 10/689,269 in view of Baer that teach the modification of the references suggested by the Examiner. Obviousness requires that the suggestion to make the claimed invention must found in the prior art. See generally, In re Vaeck, 947 F.2d 488, 493 (Fed. Cir. 1991). Such a suggestion is lacking in the cited reference. Even if the references fully taught the Applicant's invention, the Applicant traverses the rejection because nothing in copending Application No. 10/689,269 in view of Baer affirmatively suggests making the cited combination.

The cited reference, Application No. 10/689,269, teaches processed meats comprising an emulsified liquid shorting, a fat substitute, comprising dietary fiber gel. Baer, the other cited reference, teaches dressings comprising a fat substitute comprising particulate microcrystalline cellulose. The Applicant's invention on the other hand teaches dressings comprising an

emulsified liquid shorting comprising dietary fiber gel. The specification, as amended, discloses that the dietary fiber gel in the Applicant's invention comprises non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products. Nothing in Application No. 10/689,269 and Baer teaches or suggests dressings comprising emulsified liquid shortening comprising non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products.

For example, at Col. 14, lines 56-66 and at Col. 20-21, lines 16-18, Baer specifically teaches dressings comprising particulate microcrystalline cellulose as a fat substitute. At Col. 3, line 60 to Col. 4, line 5, Baer more generally teaches food products comprising particulate microcrystalline cellulose as a fat substitute. Although Baer arguably suggests the use of particulate microcrystalline cellulose for food products, generally, nothing in Baer suggests or teaches substituting particulate microcrystalline cellulose for other types of fiber, particularly, non-particulate amorphous insoluble fiber. Clearly, Baer may suggest food products comprising particulate microcrystalline cellulose, but does not teach or suggest dressings or processed meats comprising a fat substitute composition comprising non-particulate amorphous insoluble fiber.

# Combining the References Lacks a Reasonable Expectation of Success

There is nothing disclosed in copending Application No. 10/689,269 in view of Baer that teaches a reasonable expectation of success in combining the references as suggested by the Examiner. Obviousness exist when the references provide a reasonable expectation of success for the proposed combination. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097-98 (Fed. Cir. 1986). Whether the combination is obvious or unobvious requires consideration of all the evidence and resultant findings. *In re Rinehart.*, 531 F.2d 1048, 1052 (CCPA 1976). Such an expectation of success is lacking in the cited reference. Even if the references fully taught the Applicants invention, the Applicant traverses the rejection because nothing in copending Application No. 10/689,269 in view of Baer leads to an expectation of success for the identified combination.

Baer teaches fiber in the form of particular microcrystalline cellulose from the acid hydrolysis of wood pulp while the dietary fiber gel disclosed in the Applicant's application comes from the alkaline treatment of agricultural by-products. Fiber: i) is a chemically complex material that is typically a solid; ii) comes from many different sources, for example wood pulp

and agricultural by-products such as seed brans, hulls, and so forth; and iii) can be processed to produce a wide variety of products. One skilled in the art would know fiber products, such as fiber gels, depend on the fiber source and the processing.

The Applicant's invention claims dressings made with an emulsified liquid shortening composition comprising dietary fiber gel derived from agricultural by-products grains such as seed brans, hulls, and so forth. The specification, as amended, discloses that the dietary fiber gel in the Applicant's invention comprises non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products. Nothing in the cited references teaches shortening or fat substitute compositions comprising dietary fiber gel comprising non-particulate amorphous insoluble dietary fiber derived from the alkaline treatment of agricultural by-products.

For example, Baer at Col. 3, lines 60-62, teaches fat substitutes comprising particulate microreticulated microcrystalline cellulose, a source of dietary fiber. The natural sources of the cellulose as pointed out by Baer at Col. 4, lines 50-53, are "tightly packed crystalline regions . . . interspersed with ... amorphous areas [of fiber], called par-crystalline regions." Further, Baer at Col. 4, lines 31-36, states that "[i]t is important that the . . . cellulose . . . be prepared from highly crystalline microcrystalline celluloses . . . conventionally prepared from wood pulp by acid hydrolysis of cellulose fiber." (emphasis added). At Col. 4, line 53-57, Baer specifically notes that the importance of acid hydrolysis is "to attack the para-crystalline [or amorphous] regions." One skilled in the art would know that a particulate crystalline cellulose derived form the acid hydrolysis of wood pulp that specifically attacks amorphous cellulose differs from an amorphous non-particulate insoluble dietary fiber derived from the alkaline treatment of agricultural by-products that substantially disrupts cellular structure. While Baer arguably gives an expectation of success for formulating fat substitutes that use fiber gels derived from the acid treatment of wood fiber, clearly, Baer does not teach any expectation of success for formulating fat substitutes such as emulsified liquid shortening that comprises a non-particulate amorphous insoluble fiber produced by the alkaline treatment of agricultural by-products. Further, Baer teaches away from dietary fiber gel comprising amorphous fiber because Baer teaches that acid hydrolysis attacks the amorphous regions.

Finally, Application No. 10/689,269 teaches processed meats comprising emulsified liquid shortening, while this application, Application No. 10/689,267, is directed towards the use

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of emulsified liquid shortenings in a different food specie, dressings. Although Application No. 10/689,269 for processed meats may give rise to an inherent expectation of success for a genus of food products that comprise emulsified liquid shortening comprising dietary fiber gel, nothing in Application No. 10/689,269 provides any expectation that separate and distinct food product species, such as dressings, can be successfully formulated with an emulsified liquid shortening comprising dietary fiber gel, water, and lipid.

Applicant has amended the specification to clarify the foregoing distinctions. Although the specification has been amended so as to more reasonably convey the invention, and more specifically dietary fiber gel, to one skilled in the art, the amendments to the specification are expressly, implicitly, or inherently supported by the Inglett patent, a part of the original as-filed application. In view of the amendment to the specification, and above arguments, Applicant requests that the rejection of Claims 1-5 as being anticipated under 35 U.S.C. § 102 (b) be withdrawn. Further, in view of the amendment and above arguments, Applicant requests that the provisional rejections of Claims 1-5 under nonstatutory double patenting based on a judicially created doctrine be withdrawn.

The fat substitutes as in the cited reference, Baer, are functionally different from the Applicant's invention. In the cited reference, fat substitution is through the use of a solid fat replacement in the form of gels, flakes, powders, and so forth. In the Applicant's invention, fat substitution is with a liquid fat replacement. Applicant's use of liquid fat replacements is not taught in the mentioned references.

Applicant believes that the amended patent application is now in condition for allowance. Accordingly, the Applicant respectfully requests that a Notice of Allowance be issued in this case. The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes this would advance the prosecution of the matter.

Respectfully submitted

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